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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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7590 10/27/2004
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EXAMINER

MITCHELL, JASON D

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| ART UNIT | PAPER NUMBER |
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2124

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,140

Applicant(s)

KLIEWE, JOHN

Examiner

Jason Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/5/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This action is in response to an application filed on 12/05/2001.
2. Claims 1-20 are pending in this case.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A method for processing database code is claimed which is not embodied in a tangible medium such as a computer or computer readable medium. Therefore the claims only recite functional descriptive material and consequently nonstatutory subject matter.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 2, 6, 9, 13, 15 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 2, 9 and 15 recite the limitation "the actual erroneous database" in lines 4, 4-5, and 4-5 respectively. There is insufficient antecedent basis for this limitation in the

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claim. For the purposes of this examination examiner's best understanding will be used and "the actual erroneous database" will be assumed to refer to "the actual database".

Claims 6, 13 and 19 recite the limitation "actual changed database" and "actual erroneous database". There is insufficient antecedent basis for this limitation in the claim. For the purposes of this examination examiner's best understanding will be used and "the actual changed database " will be assumed to refer to "the changed database" and "the actual erroneous database" will be assumed to refer to " the actual database".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1, 7, 8, 14 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,189,010B1 to Isip (Isip).**

Regarding Claims 1, 8 and 14: Isip discloses retrieving a SPUFI code (col. 14, lines 12-19 'generate the output file ... is executed using for example SPUFI'); testing the SPUFI code using an erroneous database (col. 15, lines 19-20 'the UPDATE statements are executed and operate upon ... the exception table'); determining whether the testing is successful (col. 15, lines 23-25 'verify that the proper corrections

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have been made'); and updating an actual database based on the determining (col. 15, lines 25-27 'Once the user is satisfied ... the corrected rows can be inserted into the database table'), the updating creating an changed database.

Regarding Claim 7 and 20: The rejections of claims 1 and 14 are incorporated, respectively; further Isip discloses debugging the SPUFI code (col. 15, lines 16-19 'the user has made the desired corrections').

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 2, 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,460,041B2 to Lloyd (Lloyd).**

Regarding Claim 2, 9 and 15: The rejections of claims 1, 8 and 14 are incorporated, respectively; further Isip discloses sending the SPUFI code to a staging area (col. 14, lines 12-19 'generate the output file'); but does not disclose requesting database access.

Lloyd teaches requesting and granting update access to a database (col. 9, lines 50-53 'the request is made ... and authority is granted') in an analogous art for the purpose of

securing the data (col. 9, lines 22-24 'it may not be desirable that arbitrary users have access').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to require the updater to request and receive update access to the actual database, as taught in Lloyd (col. 9, lines 50-53 'the request is made ... and authority is granted') prior to running the SPUFI code disclosed in Isip (col. 15, lines 25-27 'Once the user is satisfied ... the corrected rows can be inserted into the database table') on the actual database, because one of ordinary skill in the art would have been motivated to protect the actual database from unauthorized change (col. 9, lines 22-24 'it may not be desirable that arbitrary users have access').

10. Claims 3, 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isip (Isip) in view of US 6,460,041B2 to Lloyd (Lloyd) as applied to claims 2, 9 and 15 above, and further in view of US 6,505,212B2 to Nakano et al. (Nakano).

Regarding Claims 3, 10 and 16: The rejections of claim 2, 9 and 15 are incorporated, respectively; further neither Isip nor Lloyd discloses locking the SPUFI code.

Nakano teaches locking code residing in a staging area (col. 20, lines 49-51 'creating a lock on item f') in an analogous art for the purpose of preventing version conflicts (col. 18, line 18 'a means to avoid conflicts').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the methods taught in Nakano (col. 20, lines 49-51) to lock the SPUFI

code disclosed in Isip (col. 14, lines 12-19) because one of ordinary skill in the art would have been motivated to ensure that the code was not changed (col. 18, line 18) once it had been tested and verified as with the methods disclosed in Isip (col. 15, lines 23-25).

11. Claims 4, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,615,222B2 to Hornibrook et al. (Hornibrook).

Regarding Claims 4, 11 and 17: The rejections of claim 1, 8 and 14 are incorporated, respectively; further Isip does not disclose copying the actual database in its entirety. However Isip does disclose copying only the rows to be effected by the update (col. 14, lines 58-60 'creating a new exception table') storing the partial copy of the database as the erroneous database (col. 15, lines 19-20 'the UPDATE statements are executed and operate upon ... the exception table') wherein the storing is performed prior to the testing (col. 14, lines 54-56 'generated prior to each time a CHECK utility operates'). Hornibrook teaches copying the actual database in its entirety (col. 1, lines 27-30 'running the query on ... a complete replica of the system') in an analogous art for the purpose of analyzing the performance of a query (col. 1, line 27 'Analyzing the performance of ... a query').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to copy the actual database as taught in Hornibrook (col. 1, lines 27-30) and execute the update query disclosed in Isip (col. 15, lines 19-20) on the copy, if system resources were available to handle the extra processing and storage requirements.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to provide the developer the opportunity to verify that the query performed correctly before updating the actual database (Isip col. 15, lines 21-25 'provides and opportunity ... to verify that proper corrections have been made').

12. Claims 5, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 2003/0,028,555 to Young et al. (Young).

Regarding Claim 5, 12 and 18: The rejections of claims 1, 8 and 14 are incorporated, respectively; further Isip does not explicitly disclose that determining further comprises comparing an expected number of changes to an actual number of changes.

Young teaches a request record change quantity corresponding to a number of expected changed (pg. 4, col. 2, lines 8-9 'compared with the expected results'); identifying an actual record change quantity the actual record change quantity corresponding to a number of actual changed records (pg. 4, col. 2, lines 8-9 'the results of running these scripts'); and comparing the request record change quantity to the actual record change quantity (pg. 4, col. 2, lines 8-11 'checking the record counts').

While Young does not explicitly teach registering a request record change quantity, it is implicit that the number of records must be determined prior to comparing such a number to the actual number of records changed (pg. 4, col. 2, lines 8-9 'compared with the expected results').

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It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the methods taught in Young (pg. 4, col. 2, lines 8-11 'checking the record counts') as at least one of the methods of verifying the update disclosed in Isip (col. 15, lines 23-25 'verify that the proper corrections have been made') because one of ordinary skill in the art would have been motivated to ensure that, among other things, the correct number of records were updated before applying the updates to the production copy of the database (col. 15, lines 25-27 'once the user is satisfied ... the corrected rows can be inserted in to the database table').

13. Claims 6, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,189,010B1 to Brodersen et al. (Brodersen).

Regarding Claim 6, 13 and 19: The rejections of claims 1, 8 and 14 are incorporated, respectively; further Isip does not disclose restoring the database after checking it for correctness.

Brodersen teaches checking the actual changed database for correctness (col. 8, lines 2-4 'in the event of ... software failure'); and restoring the actual database in response to the checking (col. 8, lines 2-4 'allow for rollback') in an analogous art for the purpose of repairing damage done to a database as a result of an update failure (col. 8, lines 2-4 'in the event of ... software failure');.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include the rollback ability taught in Brodersen in the invention disclosed in

Isip because one of ordinary skill in the art would have been motivated to repair any damage done to a database as a result of an update failure (col. 8, lines 2-4 'in the event of ... software failure').

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4,688,222 to Blum compares test results with expected results, US 2002/0178174 to Wakabayashi discloses a backup database, US 5,577,198 to Willrett et al. discloses a test database, US 5,561,763 to Eto et al. discloses a test database for use in debugging.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is 571-272-3728. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 571-272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-308-3988.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Mitchell
10/18/04



JOHN CHAVIS
PATENT EXAMINER
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